change of state, an air circulating means, such as a blower **18** utilized. The air is also dehumidified and the refrigerant then flows back to compressor **2** where the cycle is repeated.

[**0028**] When the controller switches to a reheat mode, three-way valve **29** is signaled to switch the flow of refrigerant from the cooling circuit **49**, which is closed, to hot gas reheat circuit **26** in the direction of the arrow shown between compressor **2** and reheat coil **32**. The controller makes this determination based on the temperature and humidity of the space that is being controlled. If the sensors in the room indicate that the temperature is sufficiently cool, but that the humidity remains above a preselected level, such a switch will be accomplished. In a system that utilizes more than one compressor or more than one cooling circuit, if the controller determines that maximum cooling is not required, but that additional cooling and dehumidification are required, the hot gas reheat circuit **26** will be activated simultaneously with the operation of one or more cooling circuits controlled by additional compressors in the system. Solenoid valve **203** is responsive to reheat high-pressure device **205**. When this device **205** indicates that the compressor discharge pressure is above a preselected level, device **205** causes second solenoid valve **203** to open. Since solenoid valve **203** bypasses check valve **34**, at least some refrigerant, after flowing through reheat coil **32**, is directed into condenser coil **6**. As the pressure initially increases in the reheat circuit, check valve **34** will be closed and refrigerant will flow through solenoid valve **203**, When reheat high pressure device **205** indicates that the compressor discharge pressure has stabilized at or below a preselected level, solenoid valve **203** is closed and further flow of refrigerant into condenser circuits **6** is blocked. The remaining refrigerant circulates through the hot gas reheat circuit **26**. Because the amount of refrigerant in the hot gas reheat circuit **26** is regulated by the compressor discharge pressure, problems arising from excess refrigerant in hot gas reheat circuit **26** are eliminated. Excess refrigerant is stored out of the reheat circuit and in condenser circuits **6**, which serves as a receiver, and the accumulator of the prior art may be eliminated. However, the condenser circuits are not merely a substitute for the prior art accumulator. When the accumulator is used, the refrigerant remains stored within the circuit, but is otherwise available to the compressor and can lead to excessive pressures. When the condenser circuits are used to store the excess refrigerant, the refrigerant is removed from the reheat circuit and is not available to the circuit while it remains in the reheat mode. Furthermore, when the cooling circuit is activated and the reheat circuit is inactivated, the additional refrigerant required by the cooling circuit is already located in the cooling circuit, being stored in the condenser circuits **6**. In addition to eliminating the accumulator, set forth in the prior art, the system also eliminates condenser refrigerant recovery circuit and its associated solenoid valve and conduits.

[**0029**] Reheat high pressure device **205** may be any control device that can control solenoid valve **203**. For example, reheat high pressure device **205** may be a switch that has settings. When a first preselected pressure setting is reached and is detected by switch **205**, the switch closes and sends a signal to open solenoid valve **203**. Solenoid valve **203** remains open until a second preselected pressure setting is reached. The second preselected pressure setting may be the same as the first preselected pressure setting or it may be a lower pressure. When the pressure drops below a second preselected pressure setting, the switch opens, removing the signal, thereby closing solenoid valve **203**. In another embodiment, reheat high pressure device **205** may be a sensor that senses the refrigerant discharge pressure from compressor **2**. The reheat sensor is in communication with the controller, not shown in **FIG. 2**, which is programmable. The preselected pressure can be programmed into the controller. When the pressure measured by the sensor **205** exceeds or falls below a preselected setting, the controller, which is constantly monitoring sensor **205**, sends a signal to change the status of solenoid valve **203**. For example, if the preselected pressure setting programmed into the controller is, for example **225** psig, and the pressure detected by sensor **205** exceeds this value, a signal is sent by the controller that opens solenoid valve **203**. The opened valve permits refrigerant to bypass check valve **34** and flow into condenser coil **6**. As refrigerant flows into condenser coil **6**, less refrigerant remains in reheat circuit **26** and the discharge pressure from compressor **2** begins to decrease. When the discharge pressure reaches a second preselected pressure, either at or below the first preselected pressure, the controller, which is monitoring the pressure at sensor **205**, sends a signal to close solenoid valve **203**. Thus if the second pressure is, for example, **180** psig, then the controller sends a signal that closes second solenoid valve **203**, stopping the flow of refrigerant fluid through solenoid valve **203** and around check valve **34**. The reheat circuit should now be stabilized, operating at a capacity that is within a pressure range that produces the required reheat for balancing temperature. If the system should become unstable, the reheat high-pressure device **205** will detect the change in pressure and adjust the pressure by channeling additional refrigerant into condenser **6** by repeating this process.

[**0030**] When the system is switched over to the cooling mode, such as for example, if there is a call for maximum cooling, three-way valve **29** switches to direct the compressor discharge into cooling circuit **49** in the direction of the arrow shown between compressor **2** and condenser coil **6**, stopping the flow of refrigerant into hot gas reheat circuit **26**. This circuit requires additional refrigerant to operate efficiently, but the refrigerant is already properly stored within condenser **6**. This refrigerant should already be condensed, and the pressure differential caused by compressor suction and compressor discharge will result in the flow of condensed refrigerant to the evaporator.

[**0031**] While the system illustrated in **FIG. 2** depicts reheat pressure device **205** positioned in the conduit of reheat circuit between three-way valve **29** and reheat coil **32** so as to monitor high pressure discharge from the compressor, it will be recognized by one skilled in the art that reheat pressure device **205** may be positioned anywhere in the active circuit to monitor the pressure of refrigerant at a preselected location within the circuit.

[**0032**] One skilled in the art therefore will understand that reheat pressure device **205** may be a low-pressure device. In this embodiment, the reheat pressure device is positioned in the suction line between the evaporator **12** and the suction port of compressor **2**, on the low pressure side of the compressor, to monitor the pressure of the refrigerant returning to the compressor. Second solenoid valve **203** is cycled based on preselected pressure settings as before. When the detected pressure is above a first preselected limit, the valve is opened until the pressure falls below a second preselected